

Subject:  
science and the media  
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From:  
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To:  
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Dear Faculty and Students

Below is an article in yesterday's NY times about scientists and the media by Cory Dean. I was just at an NSF/EPA/NOAA sponsored workshop on this topic (with Cory Dean and Andrew Revkin, the new managing editor of the NY Times, Science section, along with other scientists and media representatives). It is useful for those of you who do or potentially will deal with the media to understand some of the differences in culture and objectives between the two communities. I thought you might be interested in the piece below if you did not see it. If you're more interested in the topic let me know and I can send you some additional feedback from the workshop.

Ellen

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November 11, 2003

## COMMENTARY

Rousing Science Out of the Lab and Into the Limelight

By CORNELIA DEAN

Last summer, the pollster Daniel Yankelovich reported what might seem a strange finding: scientists are distressed by the media's insistence on presenting "both sides."

At first, I thought I knew what he was getting at in his paper, which appeared in *Issues in Science and Technology*, a publication of the National Academy of Sciences. From time to time, scientists have called me to complain that one or another of our articles was "wrong," in that it quoted (accurately) someone with whom they disagreed.

But this was not exactly the situation the scientists were complaining about. All too often, Mr. Yankelovich wrote, scientists who talk to reporters "find themselves pitted in the media against some contrarian, crank or shill who is on hand to provide 'proper balance.' " The scientists who

hold this view have put their finger on an important problem. In striving to be "objective," journalists try to tell all sides of the story. But it is not always easy for us to tell when a science story really has more than one side — or to know who must be heeded and who can safely be ignored. When we cast too wide a net in search of balance, we can end up painting situations as more complicated or confusing than they actually are.

For example, mainstream scientists who believe that human activities like the burning of fossil fuels are contributing to potentially disastrous climate change say we give too much space to climate dissidents — those who argue that nothing is changing, or if it is that people are not causing it, and anyway the changes will be beneficial, or that if they aren't, technological genius will engineer a fix.

By now, it seems that the mainstream view prevails almost everywhere. The dissidents are widely regarded as outliers whose opinions are notable more for the cover they give politicians than their scientific rigor. But there are plenty of responsible people who still argue their case. And as journalists we feel obliged to report their arguments, especially since one who accepts those arguments is the president of the United States.

In any event, unless you are an expert, differentiating between the genius and the crank — or even between the mainstream and the outlier — may not be easy. As with other issues that plague scientists and journalists, we journalists cannot solve this problem ourselves. We will need the help of scientists. Will we get it?

I hope so, but a lot will have to change to make it happen. Relations between scientists and journalists are often adversarial.

Last month, I was a panelist at a meeting of the Pew marine fellows, eminent fisheries and ocean scientists whose work is supported by the Pew Charitable Trusts. Nancy Baron, a zoologist and science writer who works with the fellows, organized the panel as part of her longstanding effort to help scientists better communicate their work and its importance to the wider world.

As researchers have in the past, scientists at this meeting told Ms. Baron they had a simple solution to their problems with reporters. "I don't take their phone calls" was a common refrain.

Their unwillingness to talk to us is not mysterious. Far too often, talking to reporters is a no-win proposition for scientists. They communicate their findings in learned treatises published in peer-reviewed journals, not in lay-language news reports. Decisions on whether they will be given tenure, or promoted or awarded research grants do not normally hang on what appears in the public prints. If they are in the newspaper or on television or radio too much — and their colleagues may set that bar rather low — they become known as publicity hounds or polemicists who have abandoned the purity of the laboratory for a life of celebrity.

And that's if things go well. All too often, they find themselves quoted in a report that is shoddy, inaccurate or overhyped. Pushy, unprincipled, ignorant and shallow — those were some of the milder epithets the scientists at the Pew meeting applied to me and my fellow practitioners.

But not all the blame is ours. Yes, we occasionally get things wrong. Even here at The Times, which has unrivaled resources for covering science, we struggle to keep up with mushrooming developments in fields becoming ever more specialized. We need scientists' help to get it right. Sometimes even we don't get that help, and far too often our colleagues at other news outlets don't get it. Sometimes the scientist is just unable or reluctant to tell the story in words a lay audience can understand.

As a result, Ms. Baron told the Pew fellows, journalists regard scientists as elitist, unable to talk except in jargon, obsessed with trivial details, isolated in ivory towers and unwilling to take a stand on matters of public importance.

This last point is by far the most important because it is where science reporting stops being the "gee whiz" leavening in a heavy loaf of serious news reports and starts helping readers or listeners or viewers come to their own conclusions about the increasing number of issues — global warming, reproductive rights, missile technology — that hinge on science.

It is where the question of "balance" is most important and where journalists most need scientists to stop hiding in thickets of irrelevant detail and identify the bottom line.

In other words, journalists need scientists who are citizens as well as researchers.

A year ago, at another of the Pew panels organized by Ms. Baron, a scientist took me to task for The Times's coverage of creationism. The newspaper had followed the debate over whether creationism should be included in the Kansas public school curriculum, and had also written about the version of the doctrine called "intelligent design." In doing so, the researcher argued, we were only giving credence to ideas that had nothing to do with science.

My reply was, and is, twofold. First, when state officials seriously consider basing public school biology instruction on the Bible, it's news we have to cover. Second, where were the scientists? If the idea is so outrageous, where was their outrage? We hardly heard it, except in conversations among themselves.

"Science has reached greater heights of sophistication and productivity," Mr. Yankelovich wrote in his summer paper, but scientists' influence in public debates is actually shrinking. As a result, he said, "the gap between science and public life has grown ever larger and more dangerous, to an extent that now poses a serious threat to our future."

Journalists can help narrow that gap. But only if scientists raise their voices in the nation's public debates.

Cornelia Dean, a former science editor of The New York Times, is on leave as a fellow at the Shorenstein Center at Harvard.

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Dear Bob, Gene, and Peter

To follow up with your interest on the subject, some of the other interesting discussions during the recent workshop between scientists and journalists were on the following topics:

Definition of balance - many of the journalists, print and broadcast, said they were expected by those above to have two opposing viewpoints...this is considered balance, whereas the scientists suggested balance should be proportional to the weight of evidence, based on scientific data.

Review - some scientists wanted content review before publication...some journalists will provide review of facts, but not entire content of articles - since they don't do this for anyone else.

One interesting and contentious discussion centered around the fact that journalists do not consider themselves educators...some say that indirectly they educate. However, scientists felt of course they are educators and such should provide more explanatory type stories.

A discussion of the movement towards entertainment vs. news and corporations owning media outlets and how this influences what is aired was quite thought provoking.

Suggestions of how leading science writers could help regional newspapers and broadcasters do a better job were discussed.

The journalists said that rarely when mistakes are made in print or broadcast do they actually get called with a correction, but they encouraged scientists to do more to correct inaccurate reporting.

Of course the issue of preparing to speak with journalists and getting your soundbites lined up ahead of time came up - a must for all scientists.

After a series of these workshops, the next is at Scripps in San Diego in March, they will be putting together a "best practices" type document.

The workshop was held at URI because of their Metcalf Institute program and if you know if anyone thinking of going into science writing, I highly recommend they apply to attend one of their week long sessions...they got rave reviews.

Ellen